

Application No. 10/689,587

### REMARKS

Applicant has carefully studied the outstanding Official Action mailed on October 27, 2005. This response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

The applicants wish to express their gratitude to the Examiner for the courtesy of a telephone interview with their representative David Klein, Reg. Patent Agent 41,118 on January 12, 2006. The prior art of record was discussed as will be explained hereinbelow.

Claims 10 and 20 stand rejected under 35 USC §102(b) as anticipated by Wandel (US 1519281).

Claims 1-4, 6, 11-14 and 16 stand rejected 35 USC §102(b) as anticipated by Keller (US 1878452).

Claims 1-4, 6, 10-14, 16 and 20 stand rejected under 35 USC §103(a) as being unpatentable over Wandel '281 in view of admitted prior art and Keller.

Claims 5, 7-9, 15 and 17-19 stand rejected under 35 USC §103(a) as being unpatentable over Wandel '281 in view of admitted prior art and Keller, and further in view of Bosniack (US 3887422).

As noted in the telephone interview, Wandel '281 teaches that the paper board must first be treated "with a substance capable of uniting with asphalt", e.g., linseed or fish oil. Keller teaches impregnating the paper web with bitumen to form a bituminous felted stock, and layers of the bituminous stock are bonded by a bituminous adhesive. It was pointed out in the interview that none of the references teaches or contemplates simply bonding untreated lignocellulosic material with a bitumen adhesive. The prior art seems to deem this an inferior bonding technique, but the present invention uniquely teaches to the contrary that it does form a sufficient bond for corrugated board and wound paper products. The other cited patents (Wandel '188 and Wandel '157, as well as Bosniack and Buck et al.) do not teach this feature of bonding untreated lignocellulosic material.

Claims 1, 10, 11 and 20 have been accordingly amended to recite that "the lignocellulosic material has not been substantially pre-treated with bitumen". It is respectfully submitted that this amendment overcomes the above rejections.

In the interview, the Examiner expressed concern about lack of basis in the original specification for this recitation. Applicant respectfully disagrees as is now explained.

First of all, Applicant feels that the original description does have textual basis for the recitation in the amended claims. Page 3, fourth paragraph: "Bitumen (or bituminous

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materials, the terms being used interchangeably throughout), which includes without limitation, asphalt, pitch and coal tars, has been utilized in the past as a sealing material, such as roofing material, road paving material or impregnation material. However, bituminous materials have not heretofore been used for bonding layers of products like spiral-wound or convolute-wound tubes and/or corrugated board."

The last sentence mentions bonding layers with bitumen. The previous sentence mentions the prior art use of bitumen as an impregnation material. The juxtaposition of one sentence mentioning bitumen for impregnation and the very next sentence silent about the need for impregnation clearly points to the last sentence meaning bonding layers without pre-impregnation.

Another example is the first full paragraph of page 3: "The layer material may be lignocellulosic, and may comprise, without limitation, paper, Kraft paper, chipboard, cardboard, manila and other suitable substrates and materials. Other non-lignocellulosic materials may additionally be used, such as but not limited to, aluminum foil coated with a polymer, plastic sheets and many others."

Note that when the intention is to coat a material with another material, the text clearly states this. It is not just aluminum foil, rather aluminum foil coated with a polymer. From this it can be clearly inferred that whenever the text does not mention coating, the material is indeed not coated. Thus, when the text refers to lignocellulosic materials it is understood that they are not coated, i.e., not pre-treated.

Second, Applicant respectfully wishes to point out that negative limitations that lack express support in the written description are not objectionable, and meet the requirements of 35 USC 112, as is now explained.

MPEP 2173.05(i) states, inter alia, "Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a *prima facie* case for lack of descriptive support. *Ex parte Parks*, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993)."

In *Ex parte Margaret Gardner Macphail* (Appeal No. 2004 1557, Application 09/451,942), ([www.uspto.gov/web/offices/dcom/bpai/decisions/fd041557.pdf](http://www.uspto.gov/web/offices/dcom/bpai/decisions/fd041557.pdf)), the Board of Appeals succinctly states the Examiner's position and rebuts it. Quoting therefrom: "The examiner's rejection is tantamount to a per se prohibition of any negative limitation that does not have expressly stated support in the originally filed specification. *Ex parte Grasselli*, 231

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USPQ 393 (Bd. App. 1983) aff'd mem., 738 F.2d 453 (Fed. Cir. 1984), appears to provide support for the examiner's position because the Board found that the negative limitation added to the claims introduced new concepts in violation of the description requirement of the first paragraph of 35 U.S.C. § 112. In the subsequent case of *Ex parte Parks*, 30 USPQ2d 1234, 1236 (Bd. App. 1994), the Board did not adhere to Grasselli's per se prohibition of negative limitations that lack express written description support in the originally filed disclosure, and, instead, resorted to a more reasonable test of what the originally filed disclosure would have conveyed to one having ordinary skill in the art."

Quoting from *Ex parte Parks*, 30 USPQ2d 1234, 1236 (Bd. App. 1994): "The initial burden of establishing a prima facie basis to deny patentability to a claimed invention on any ground is always upon the examiner. In *re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed.Cir.1992). In rejecting a claim under the first paragraph of 35 U.S.C. 112 for lack of adequate descriptive support, it is incumbent upon the examiner to establish that the originally-filed disclosure would not have reasonably conveyed to one having ordinary skill in the art that an appellant had possession of the now claimed subject matter. *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed.Cir.1993). Adequate description under the first paragraph of 35 U.S.C. 112 does not require literal support for the claimed invention. In *re Herschler*, 591 F.2d 693, 200 USPQ 711 (CCPA1979); In *re Edwards*, 568 F.2d 1349, 196 USPQ 465 (CCPA1978); In *re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA1976). Rather, it is sufficient if the originally-filed disclosure would have conveyed to one having ordinary skill in the art that an appellant had possession of the concept of what is claimed. In *re Anderson*, 471 F.2d 1237, 176 USPQ 331 (CCPA1973). The examiner contends that the rejected claims lack adequate descriptive support because there is "no literal basis for the" claim limitation "in the absence of a catalyst." Clearly, the observation of a lack of literal support does not, in and of itself, establish a prima facie case for lack of adequate descriptive support under the first paragraph of 35 U.S.C. 112. In *re Herschler*, supra; In *re Edwards*, supra; In *re Wertheim*, supra. The examiner notes that in *Parks v. Fine*, 773 F.2d 1577, 227 USPQ 432 (Fed.Cir.1985), involving the claimed subject matter, the limitation "in the absence of a catalyst" was considered material. Suffice it to say, no issue under the first paragraph of 35 U.S.C. 112 for lack of adequate descriptive support for the limitation "in the absence of a catalyst" was before the court. We are not unmindful of the decision in *Ex parte Grasselli*, 231 USPQ 393 (Bd.App.1983) aff'd mem., 738 F.2d 453 (Fed.Cir.1984), which involved claims to a process for the ammoxidation of propane or isobutane employing a catalyst "free of uranium and the

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combination of vanadium and phosphorus.” Under the particular facts in that case, it was held that the negative limitation introduced new concepts in violation of the description requirement of the first paragraph of 35 U.S.C. 112, citing *In re Anderson*, supra. In the situation before us, it cannot be said that the originally-filed disclosure would not have conveyed to one having ordinary skill in the art that appellants had possession of the concept of conducting the decomposition step generating nitric acid in the absence of a catalyst. See, for example, column 5 of the '562 patent, first paragraph, wherein FIG. 4 is discussed. Pyrolysis temperatures of between 600°C and 700°C and above 700°C were employed to achieve conversion of chemically bound nitrogen to nitric oxide. Smooth conversion was obtained above 700°C, while the optimum conversion was found to occur above 900°C. Throughout the discussion which would seem to cry out for a catalyst if one were used, no mention is made of a catalyst.”

Applying this reasoning to the instant invention, Applicant respectfully feels that anyone skilled in the art would agree that if the original description required pre-treating the stock before bonding with bitumen, the original description most certainly “would seem to cry out” for such pre-treatment if it were used, and the fact that no mention is made of pre-treatment certainly teaches the skilled artisan that one can bond the material with bitumen without pre-treatment otherwise undo experimentation would have been necessary, and even worse, the skilled artisan would have been misled into trying out the invention without pre-treatment. Rather the lack of mention of pre-treatment correctly informs the skilled artisan and the public that the invention is to be carried out without any need for pre-treatment.

In conclusion, it is respectfully submitted that the negative limitation added to claims 1, 10, 11 and 20 is valid, acceptable, and overcomes the above rejections.

An IDS is being filed concurrently with this response. In the IDS, prior art cited in the corresponding PCT application is listed. It is respectfully submitted that this art does not negative the patentability of the claims as amended. GB452676 requires soaking the web in bitumen prior to bonding. Page 3, lines 26-30: “...a flexible web, such as paper, upon a mandrel while immersed in a bath of molten mineral adhesive which sets on cooling, such as bitumen, pitch or tar...”

US 1990248 and GB 1348385 also describe material impregnated with bitumen prior to bonding.

GB 596610 was cited by the PCT examiner, but deals with an “adhesive composition, particularly for use in making multiply paper board [that] comprises an

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aqueous dispersion of bitumen and a water-soluble artificial resin of the type that acts by the action of heat, catalysts or other means. The bitumen may be coal tar, pitch or, preferably, asphalt, and the resin may be water-soluble phenol-formaldehyde, melamine, urea-furfural, furfuryl alcohol or, preferably, urea-formaldehyde resin. The bitumen and resin are preferably incorporated in an inorganic or organic glue, such as sodium silicate, starch, albumen, gelatin, fish glue, hide glue, bone glue, or casein." In other words, in GB 596610 the bitumen is not the active component of the adhesive but rather an additive to some other adhesive.

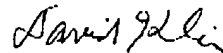
US 2288293 is an adhesive for paper or paperboard which has an additive of bitumen emulsion and liquid latex. Again the bitumen is not the active component of the adhesive but rather an additive to some other adhesive.

Claims 2 and 12 have been cancelled merely because their recitation is contained in the independent claims. Accordingly, claims 1, 3-11 and 13-20 are respectfully deemed patentable over the cited art. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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